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### REMARKS

Applicant submits a Petition and Fee for One-Month Extension of Time.

Claims 1-2 and 4-19 are all the claims presently pending in the application. Claim 6 has been amended to more particularly define the invention.

It is noted that the claim amendments herein or later are not made to distinguish the invention over the prior art or narrow the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein or later should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

With respect to the prior art rejections, claims 1, 5-7, 9-10, 17 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Vora et al. (U.S. Patent No. 5,819,273). Claim 2 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of Sanada et al. (U.S. Patent No. 6,484,245). Claims 4 and 15 are rejected under 35 U.S.C. §103(x) as being unpatentable over Vora in view of De Bellis (U.S. Patent No. 6,760,720). Claims 4 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of De Bellis and Roderick (U.S. Patent No. 6,122,648). Claims 5 and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of Roderick. Claim 8 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of Colby (U.S. Patent No. 6,480,836). Claims 11-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of Sanada et al. and further in view of Dekoning (U.S. Patent No. 6,671,776). Claims 13-14 are rejected under 35 U.S.C. §103(x) as being unpatentable over Vora et al. in view of Sanada et al. and Lee et al. (U.S. Patent No.

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6,061,696). Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of De Bellis and further in view of Lee et al. Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of De Bellis and Roderick and further in view of Lee et al. Claim 17 is rejected under 35 U.S.C. §103(x) as being unpatentable over Vora et al. in view of Roderick. Claim 18 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of Roderick and further in view of McClure et al. (U.S. Patent No. 6,850,928). Claim 18 is rejected under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of McClure et al.

Pursuant to the Interview with the Examiner on August 5, 2005, the rejection of claims 4 and 15 under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of De Bellis and Roderick has been withdrawn by the Examiner. The rejection of claims 5 and 19 under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of Roderick has been withdrawn by the Examiner. The rejection of claim 16 under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of De Bellis and Roderick and further in view of Lee et al. has been withdrawn by the Examiner. The Examiner has changed the rejection of claim 16 to be under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of De Bellis and further in view of Lee et al. and McClure et al. The rejection of claim 18 under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of Roderick and further in view of McClure et al. (U.S. Patent No. 6,850,928) has been withdrawn by the Examiner. The Examiner has changed the rejection of claim 18 to be under 35 U.S.C. §103(a) as being unpatentable over Vora et al. in view of McClure et al. and further in view of Lee et al.

The rejections are respectfully traversed in the following discussion.

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## I. THE CLAIMED INVENTION

The claimed invention is directed to a database system, a database server, and a method of controlling the operation of a database server.

In one exemplary aspect, as recited in claim 1, the database system includes a database in which data has been stored accessibly, a search device for accessing the database in accordance with an applied search command and searching data that has been stored in the database, a command execution device, to which a command is entered, for applying a search command to the search device in accordance with this entered command, and a first interface for separably and directly connecting, without via a network, the search device and the command execution device.

Another aspect of the invention, as recited in claim 4, is directed toward a database server including a first receiving device for receiving a search command transmitted via a network, a search device for searching the database based upon the search command received by the first receiving device, a first determining device for determining whether the search command, which has been received by the first receiving device, can be transmitted to another database server, a transmitting device for transmitting the received search command to the another database server when it is determined that the received search command can be transmitted to the another database server by the first determining device, a second receiving device for receiving data, which represents search results, transmitted from the another database server in accordance with transmission of the search command to the another database server by the transmitting device, and an output device for outputting, in mutually

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correlated form, data representing search results obtained by the search by the search device and data representing search results received by the second receiving device.

In yet another aspect of the invention, as recited in claim 5, the method of controlling operation of a database server includes receiving a search command transmitted via a network, searching a database based upon the received search command, determining whether the received search command can be transmitted to another database server, transmitting the received search command to another database server when it is determined that the received search command can be transmitted to another database server, receiving data, which represents search results, transmitted from the another database server in accordance with transmission of the search command to the another database server, and outputting, in mutually correlated form, data representing search results obtained by the search and data representing received search results.

Such features are not taught or suggested by the cited references.

## II. THE PRIOR ART REFERENCES

### A. The Vora et al. Reference

The Examiner alleges that the invention, as recited in claims 1, 5-7, 9, 10, 17 and 19, is anticipated by the Vora et al. reference. However, Applicant respectfully submits that Vora et al. does not teach or suggest each and every element of the invention as claimed.

Vora et al. discloses a method and apparatus for maintaining information in a network of computer systems and for controlling the display of searchable information. (Vora et al. at Abstract)

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However, Vora et al. fails to teach or suggest a first interface for separably and directly connecting, without via a network, the search device and the command execution device, as recited in claim 1.

The invention, as recited in claim 1, includes a first interface for separably and directly, without via a network, connecting the search device and the command execution device. Since the first interface directly connects, without via a network, the search device and the command execution device in such a manner that the two can be separated from each other, the search device connected to the command execution device can be disconnected and a different search device, employing a desired search technique, can be connected to the command execution device. (See Application at page 3, lines 26-28 and page 4, lines 1-8)

In Vora et al., a server computer system 9 communicates with a client computer 33 through a network coupler 31, such as a network bus. The server 9 and client computer 33 are provided with network couplers, 25 and 35, respectively, which couple the components of the server 9 and client computer 33 via the network coupler 31. (See Vora et al. at Figure 1, column 5, lines 29-32 and column 6, lines 12-15) The server computer system 9 includes a processor 10 and a memory 11 which are interconnected by a system bus 12, and a mass memory 17, such as a local hard disk that stores information, coupled to the processor 10 and memory 11 through the system bus 12. (See Vora et al. at column 5, lines 54-61)

To perform a search, keywords entered to the client computer 33 by the user are used to define a search request and the search request is sent to the server 9 via network interface 25 and the network coupler 31. Once received by the server 9, the search request (keywords) is executed by the processor 10 and the information stored in the mass memory 17. (See

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Vora et al. at column 6, lines 43-55) The memory 11 includes searching and indexing software 207 typically executed on the processor 10 for searching and indexing information. (See Vora et al. at column 8, lines 63-67 and column 9, lines 1-9)

The Examiner asserts that the search and indexing engine 207 in the memory 11 and processor 10 of Vora et al. correspond to the search device and command execution device, respectively, of claim 1. The Examiner further alleges that the search and indexing engine 207 in the memory 11 and processor 10 are connected by the network coupler 31. However, as noted above, the memory 11 and the processor 10 are coupled together by the system bus 12. The network coupler 31 merely connects the server computer system 9 and client computer 33. (See Vora et al. at Figure 1, column 5, lines 29-41 and lines 54-61)

There is no teaching or suggestion in Vora et al. that the network coupler 31 couples the memory 11 and the processor 10, let alone that it couples the memory 11 and processor 10 separably and directly, without via a network, as in claim 1. Even assuming arguendo that the network coupler 31 did connect the memory 11 and processor 10, the network coupler 31 would inherently couple any devices connected thereto via a network. The network coupler 31 and system bus 12 are clearly two distinct elements with different functions.

Notwithstanding, there is no teaching or suggestion in Vora et al. that the memory 11 and the processor 10 are separably connected by either the network coupler 31 or the system bus 12. Indeed, Vora et al. does not even recognize the desirability or benefit of providing "a first interface for separably and directly connecting, without via a network, [the] search device and [the] command execution unit," as recited in claim 1. (Emphasis added)

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Accordingly, Applicant respectfully submits that Vora et al. does not teach or suggest each and every element of the claimed invention, as recited in claim 1.

Regarding independent claim 5, the Examiner concedes in item 8, page 23 of the Office Action that Vora et al. does not teach or suggest determining whether the received search command can be transmitted to another database server and transmitting the received search command to another database server when it is determined that the received search command can be transmitted to another database server, as recited in independent claim 5.

Regarding independent claim 19, the Examiner concedes in item 8, page 25 of the Office Action that Vora et al. does not teach or suggest a means for determining whether the received search command can be transmitted to another database server and a means for transmitting the received search command to another database server when it is determined that the received search command can be transmitted to another database server, as recited in independent claim 19.

Notwithstanding, the Examiner attempts to assert that the above features of independent claims 5 and 19 are disclosed in Vora et al. However, the reference merely discloses that "the user may enter a single search request and then request either the local processor (e.g. the client workstation) or a remote processor (e.g. a server workstation) the execute the search request." (Vora et al. at column 1, lines 55-60) As such, the user merely specifies the search location in the search request. There is no teaching or suggestion of a database server determining whether the received search command can be transmitted to another database server and transmitting the received search command to another database server when it is determined that the received search command can be transmitted to another

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database server, as recited in independent claims 5 and 19. As noted above, the Examiner has conceded this point in the Office Action.

Similarly, regarding claim 17, the Examiner concedes in item 3, page 11 and item 14, page 32 of the Office Action that Vora et al. does not teach or suggest determining whether the received search command can be transmitted to another database server is based upon data accompanying the search command for determining whether the search command can be transmitted, as recited in claim 17. As noted above, Vora et al. merely discloses that the user may specify the search location in the search request. However, there is no teaching or suggestion of the database server making a determination of whether a received search command can be transmitted to another database server based on any data of any sort.

Clearly, there are elements of the invention defined by independent claims 5 and 19, and claim 17, that are not taught or suggested by Vora et al.

Regarding claim 6, the Examiner alleges that Vora et al. teaches that “[the] search device is replaceable by a second search device upon separation from [the] command execution device,” as recited in claim 6. However, Vora et al. merely discloses that “performing a single search from a single search request is well-known,” and that “the memory 11 further includes request and reply control software and windowing interface software which may be implemented using conventional techniques.” (See Vora et al. at column 9, lines 3-8)

Indeed, performing a single search based on a single search request is well-known. However, providing additional software for controlling requests and replies in the memory 11 does not teach or suggest that the search device is replaceable by a second search device, as



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alleged by the Examiner. As noted above, nowhere does Vora et al. teach or suggest that the memory 11 and the processor 10 are separably connected in any manner. Vora et al. certainly does not teach or suggest that the search unit may be replaced by a second search unit upon separation of the search unit from the command execution unit, as recited in claim 6.

Likewise, there is no teaching or suggestion in Vora et al. that "[the] search device employs a search technique different than a search technique of [the] second search device," as recited in claim 7. Rather, Vora et al. merely discloses processing multiple searches using well known multithreaded processing techniques such that the multiple searches can be multitasked. (See Vora et al. at column 12, lines 22-37)

As previously indicated, nowhere does Vora et al. teach or suggest that the memory 11 and the processor 10 are separably connected in any manner. Further, as noted above, Vora et al. does not teach or suggest that the search unit may be replaced by a second search unit, let alone that the second search device employs a different search technique, as in claim 7. Clearly, there are elements of claims 6 and 7 that are not taught or suggested by Vora et al.

In light of the above, Applicant respectfully submits that there are elements of the invention of claims 1, 5-7, 9, 10, 17 and 19 that are not taught or suggested by Vora et al. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### **B. The Sanada et al. Reference**

The Examiner alleges that Vora et al. would have been combined with Sanada et al. to form the invention of claim 2. However, Applicant submits that these references would not

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have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Sanada et al. discloses an apparatus for and method of accessing a storage region across a network. The disclosure relates to storage control apparatus with ANSI3T11-standardization fiber channels as an interface with its upper-level or "host" computers, and more particularly to a storage controller device which is employable in a computer system for elimination of unauthorized access attempts upon issuance of a request to access the storage as sent from a host computer to the storage controller. (Sanada et al. at page 1, lines 1-15)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Further, Sanada et al. fails to make up for the deficiencies of Vora et al. described above directed to the first interface separably and directly connecting, without a network, the search device and the command execution device.

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Moreover, neither Vora et al., nor Sanada et al., nor any combination thereof, teaches or suggests *"a second interface for separably connecting [the] storage controller and [the] command execution device,"* as recited in claim 2.

The Examiner admits that Vora et al. does not teach, amongst others, this feature. Rather, the Examiner attempts to rely on Figure 1 and column 5, lines 35-37 and column 6, lines 1-3 of Sanada et al. to make up for the deficiencies of Vora et al.

The invention, as recited in claim 2, includes a second interface for separably connecting the storage controller and the command execution device. In this manner, the storage controller and the command execution device can be disconnected and a different storage controller can be connected to the command execution device. (Application at page 4, lines 21-28 and page 5, line 1)

Sanada et al., on the other hand, discloses that "[t]he host computers 10,20,30 and storage controller 40 employ a fiber channel 60 as the interface, and are connected together via a device known as the 'fabric.'" (See Sanada et al. at column 5, lines 35-37) However, nowhere does Sanada et al. teach or suggest that the fiber channel 60 interface separably connects the storage controller and the host computers 10,20,30, as in claim 2.

Rather, Sanada et al. merely discloses that the fabric may have technical advantages, such as high data transfer speed and capability for a multi-layered logical bus configuration. (See Sanada et al. at column 6, lines 14-31) Indeed, Sanada et al. makes no reference or suggestion that the interface separably connects the host computers and storage controller.

Thus, even assuming arguendo that Sanada et al. may disclose an interface, as alleged by the Examiner, there is no teaching or suggestion in Sanada et al. that the host computers

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10,20,30 and storage controller 40 are separably connected by the interface to permit the substitution of a different storage controller, as in claim 2. Further, Sanada et al. fails to make up for the deficiencies of Vora et al. described above directed to the first interface separably and directly, without a network, the search device and the command execution device. Indeed, the cited reference does not even recognize the desirability or benefit of providing such features. Therefore, Sanada et al. clearly does not make up for the deficiencies of Vora et al.

In light of the above, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of claim 2. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### **C. The De Bellis Reference**

The Examiner alleges that Vora et al. would have been combined with De Bellis et al. to form the invention of claims 4 and 15. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

De Bellis discloses a Sort-on-the-Fly/Search-on-the-Fly search engine that provides intuitive mechanisms for searching databases, allowing a user to access data in the database without having to know the database structure. (De Bellis at Abstract)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of

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ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner.

The Examiner concedes that Vora et al. does not teach or suggest "a second receiving device for receiving data, which represent search results, transmitted from [the] another database server in accordance with transmission of the search command to [the] another database server by [the] transmitting device," as recited in claims 4 and 15. Rather, the Examiner attempts to rely on De Bellis to make up for the deficiencies of Vora et al.

In accordance with the invention, as recited in claims 4 and 15, a search command transmitted via a network is received and a database is searched based upon the received search command, however, if it is determined that the received search command can be transmitted to another database server, the received search command can be transmitted to other database servers as well. (Application at page 7, lines 18-22)

Another database server that receives the search command also conducts a database search to find the relevant data. The data that is found is sent from the server of the other database to the database server that transmitted the search command. Data transmitted from the server of the other database and found as a result of the search by the other database servers is received by the database server that originally received the search command. The data found by the servers of the other databases is correlated with the data found by the search conducted by the database that received the search command via the network. The correlated data is then output. (Application at page 7, lines 23-28 and page 8, lines 1-7)

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The Examiner asserts that it would have been obvious to apply the database driver 170 of De Bellis for receiving results of a search of remote databases to Vora et al. However, De Bellis discloses that “[t]he database driver 170 is the universal interface with the database 12, which can be a local or remote database.” (See De Bellis at column 9, lines 40-43) De Bellis further discloses that “the query generator 150 receives results 153 of a search of the database 12 (not shown in FIG. 3) from the database driver 170.” (See De Bellis at column 4, lines 57-59) As such, the database driver 170 merely retrieves information from the database 12 to which it has access and provides those results to the query generator 150.

However, there is no teaching or suggestion in De Bellis that the database driver 170 receives data representing search results transmitted from another database server, as in claim 4 and 15. Rather, in De Bellis, the database server 170 merely interfaces with the databases 12. In fact, nowhere in De Bellis is there any suggestion as to the desirability of the database driver 170, or any other element, to receive data representing search results transmitted from another database server.

Moreover, neither Vora et al., nor De Bellis, nor any combination thereof, teaches or suggests “a first determining device for determining whether the search command, which has been received by the first receiving device, can be transmitted to another database server,” as recited in claims 4 and 15. (Emphasis added)

Indeed, the Examiner concedes in item 7, page 20 of the Office Action that Vora et al. does not teach or suggest a first determining device for determining whether the received search command, which has been received by the first receiving device, can be transmitted to another database server, as recited in claims 4 and 15.

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Additionally, there is no teaching or suggestion in De Bellis of a first determining device for determining whether the search command can be transmitted to another database server. As noted above, merely by receiving a single search command, a search can be conducted not only by a single database server that received the search command, but also by other database servers.

Further, the Examiner concedes in item 7, page 21 of the Office Action that Vora et al. does not teach or suggest that "the search command is accompanied by data for determining whether the search command can be transmitted to [the] another database server; [the] first determining device determining whether the search command can be transmitted based upon the accompanying data" as recited in claim 15.

Clearly, Vora et al. and De Bellis fail to teach or suggest each and every element of the invention of claims 4 and 15.

Thus, even assuming arguendo that De Bellis discloses a second receiving device, as alleged by the Examiner, there is no teaching or suggestion in De Bellis of a first determining device for determining whether the search command can be transmitted to another database server to allow a search to be conducted on the other database servers by receiving a single search command, as in claim 4 and 15. (Application at page 8, lines 8-11) Indeed, the cited references do not even recognize the desirability or benefit of providing such a feature. Therefore, De Bellis clearly does not make up for the deficiencies of Vora et al.

In light of the above, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every

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element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### **D. The Roderick Reference**

The Examiner alleges that Vora et al. would have been combined with Roderick to form the invention of claims 17. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Roderick discloses an apparatus comprising a storage medium and a communicatively coupled processor. (Roderick at Abstract)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.



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The Examiner concedes that Vora et al. does not teach or suggest determining whether the received search command can be transmitted to another database server is based upon data accompanying the search command for determining whether the search command can be transmitted, as recited in claim 17. Rather the Examiner attempts to rely on Roderick to make up for the deficiencies of Vora et al.

The Examiner asserts that Roderick teaches a mining agent 204 that employs common gateway interface commands in addition to SQL search commands to access remote databases through a gateway server. Roderick discloses a mining agent 204 which issues search commands to a local database via processors and I/O ports or accesses remote databases through a gateway server. Roderick indicates that the mining agent 204 may employ a hierarchical search of all accessible resources by first accessing local databases before accessing remote locations. (See Roderick at column 7, lines 35-45)

However, there is no teaching or suggestion in Roderick that the mining agent 204, or any other element, determines whether the search command, which has been received by the first receiving device, can be transmitted to another database server, as in claims 4 and 15. The mining agent 204 in Roderick merely searches all available accessible resources without any determination regarding the search command. There is certainly no teaching or suggestion in Roderick of the database server making a determination of whether a received search command can be transmitted to another database server based on any data of any sort.

Further, the Examiner indicates that Vora et al. does not teach or suggest "transmitting the received search command to [the] another database server when it is determined that the received search command can be transmitted to [the] another database server by [the] first

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determining device," as recited in claim 5 upon which claim 17 depends. In fact, the Examiner does not provide a reference which teaches or suggests the limitation.

In light of the above, Applicant submits that Vora et al. and Roderick would not have been combined and even if combined, the combination would not teach or suggest each and every element of the invention of claim 17. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### **E. The Colby et al. Reference**

The Examiner alleges that Vora et al. would have been combined with Colby et al. to form the invention of claim 8. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Colby et al. discloses methods and apparatus for processing precomputed views for answering user queries on a database. (Colby et al. at Abstract)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

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Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

The Examiner concedes that Vora et al. does not teach or suggest "a relational database management system containing attribute information corresponding to [the] data, wherein [the] relational database management system is searchable by [the] search device," as recited in claim 8. Rather, the Examiner attempts to rely on Colby et al. to make up for the deficiencies of Vora et al.

However, Colby et al. fails to make up for the deficiencies of Vora et al. described above directed to "*a first interface separably and directly connecting, without via a network, [the] search device and [the] command execution device,*" as recited in claim 8. Indeed, neither Vora et al., nor Colby et al., nor any combination thereof, teaches or suggests this feature.

Thus, even assuming arguendo that Colby et al. may disclose a relational database management system containing attribute information corresponding to data that is searchable by the search device, as alleged by the Examiner, there is no teaching or suggestion in Colby et al. of a first interface separably and directly connecting, without via a network, the search device and the command execution device to permit the substitution of a different storage controller, as in claim 8. Indeed, the cited reference does not even recognize the desirability or benefit of providing such features. Colby et al. clearly does not make up for the deficiencies of Vora et al.

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In light of the above, Applicant submits that Vora et al. and Colby et al. would not have been combined and even if combined, the combination would not teach or suggest each and every element of claim 8. Therefore, the Examiner is respectfully requested to withdraw this rejection.

**F. The Dekoning et al. Reference**

The Examiner alleges that Vora et al. would have been combined with Sanada and Dekoning to form the invention of claims 11-12. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Dekoning discloses a system and method for dynamically generating the topology of a storage array network by linking information concerning hosts and clusters along with information about host port adapters. (Dekoning at Abstract)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore,

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the Examiner has failed to make a prima facie case of obviousness.

The Examiner concedes that Vora et al. and Sanada et al. do not teach or suggest that "[the] storage controller is replaceable by a second storage controller upon separation from [the] command execution device," as recited in claims 11 and 12. Rather, the Examiner attempts to rely on DeKoning to make up for the deficiencies of Vora et al. and Sanada et al.

However, DeKoning discloses that "[i]n an alternate embodiment, each RAID controller in the data storage system may be replaced with PCI RAID controllers or other low end RAID controllers." (See DeKoning at column 4, lines 17-20) As such, DeKoning merely discloses that different embodiments may contain different controllers. In fact, DeKoning discloses that the storage controllers 116 are coupled to a host adaptor 104 of the host system 102 by host buses 112. (See DeKoning at Figure 1, column 3, lines 62-65, and column 4, lines 13-19) DeKoning makes no mention or suggestion that the RAID controllers may be separably connected to the host adapters or host system.

Clearly, DeKoning does not disclose that the storage controller is separably connected to the command execution device by a second interface such that the storage controller is replaceable upon separation from the command execution device, as in claims 11 and 12.

Further, DeKoning fails to make up for the deficiencies of Vora et al. and Sanada et al. described above directed to "*a first interface separably and directly connecting, without via a network, [the] search device and [the] command execution device,*" as recited in claims 11 and 12. Indeed, neither Vora et al., nor Sanada et al., nor DeKoning, nor any combination thereof, teaches or suggests this feature.

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Thus, even assuming arguendo that DeKoning may disclose that a storage controller is replaceable by a second storage controller upon separation from the command execution device, as alleged by the Examiner, there is no teaching or suggestion in DeKoning of a first interface separably and directly connecting, without via a network, the search device and the command execution device to permit the substitution of a different storage controller, as in claims 11 and 12. Indeed, the cited reference does not even recognize the desirability or benefit of providing such features. DeKoning clearly does not make up for the deficiencies of Vora et al. and Sanada et al.

In light of the above, Applicant submits that Vora et al., Sanada et al. and DeKoning would not have been combined and even if combined, the combination would not teach or suggest each and every element of claims 11 and 12. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### G. The Lee et al. Reference

The Examiner alleges that Vora et al. would have been combined with Sanada et al. and Lee et al. to form the invention of claims 13-14. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Lee et al. discloses a method performed on a computer system for generating multimedia documents. (Lee et al. at Abstract)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of

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ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Regarding claims 13 and 14, the Examiner concedes that neither Vora et al., nor Sanada et al., nor any combination thereof, teaches or suggests "an expression-format converter for generating data having a desired expression format when it is determined that data having the desired expression format is not stored in the database," as recited in claim 13, or that the "expression format converter is separably connected to [the] command execution device by [the] second interface," as recited in claim 14. Rather, the Examiner attempts to rely on column 3, lines 1-5 and column 8, lines 5-20 of Lee et al. to make up for the deficiencies of Vora et al. and Sanada et al.

Lee et al. discloses that a converted format of an object can be stored as a local file apart from the file containing the native format version. The objects that can be represented in a multimedia document using one format can be manipulated in another format. Lee et al. indicates that many different variations of conversion operations are available, including between different formats of the same media type and between different media types. (See Lee et al. at column 3, lines 1-19)

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The Examiner asserts that the above shows that the system in Lee et al. determines that data having the desired format is not stored in the database, as in claims 13 and 14. However, the fact that the system in Lee et al. converts objects between formats and saves the converted version, does not suggest that the system generated that converted file upon determination that the converted file was not stored in the database, as in claims 13 and 14. The allegation of the Examiner is further unsupported in light of the fact that Lee et al. does not teach or suggest the system making such a determination.

The Examiner actually suggests that Lee et al. does not teach or suggest this feature in item 12, page 29 of the Office Action, stating that Vora et al., Sanada et al. and Lee et al. do not explicitly disclose a second determining device for determining whether the data, which has an expression format indicated by a received search command by the first receiving device, is stored in the database.

There is also no teaching or suggestion in Lee et al. that the expression-format converter is separably connected to the command execution unit by the second interface. Rather, Lee et al. merely discloses that the author may determine converting preferences and parameters and the various file types to be created. Nowhere does Lee et al. teach or suggest that the converter and command execution unit are separably connected, as in claim 14.

Further, Lee et al. fails to make up for the deficiencies of Vora et al. described above directed to a first interface for separably and directly connecting, without via a network, the search device and the command execution device, as in claims 13 and 14.

Thus, even assuming arguendo that Lee et al. may disclose an expression-format converter for generating data having a desired expression format when it is determined that



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data having the desired expression format is not stored in the database, as alleged by the Examiner, there is no teaching or suggestion in Lee et al. that the search device and the and the command execution device are separably connected by the first interface to permit the substitution of a different search device, as in claim 13 and 14. Indeed, the cited reference does not even recognize the desirability or benefit of providing such a feature. Therefore, Lee et al. clearly does not make up for the deficiencies of Vora et al. and Sanada et al.

In light of the above, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of claims 13 and 14. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### H. The McClure et al. Reference

The Examiner alleges that Vora et al. would have been combined with DeBellis, McClure et al. and Lee et al. to form the invention of claim 16 and that Vora et al. would have been combined with McClure et al. and Lee et al. to form the invention of claim 18. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

McClure et al. discloses a system for, and method of, automatically retrieving a directory object from a database and a directory server incorporating the system or the method. (McClure et al. at Abstract)

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Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teaches or suggests their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

The Examiner concedes that Vora et al. and Lee et al. do not teach or suggest "a second determining device for determining whether the data, which has an expression format indicated by the received search command by [the] first receiving device, is stored in the database," as recited in claim 16. Rather, the Examiner attempts to rely on McClure et al. to make up for the deficiencies of Vora et al. and Lee et al.

Likewise, the Examiner concedes that Vora et al. fails to teach or suggest "determining whether the data, which has an expression format indicated by the received search command, is stored in the database," as recited in claim 18. Again, the Examiner attempts to rely on McClure et al. to make up for the deficiencies of Vora et al.

However, McClure et al. does not make up for the deficiencies of Vora et al. regarding "generating data having the expression format when it is determined that the data having the expression format is not stored in the database," as in claim 18. The Examiner

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attempts to introduce Lee et al. to make up for this deficiency, but Lee et al. fails to disclose or suggest such a feature, as described above.

Further, McClure et al. fails to make up for the deficiencies of Vora et al. and Lee et al. directed toward determining whether the received search command can be transmitted to another database server and transmitting the received search command to another database server when it is determined that the received search command can be transmitted to another database server, as in claim 16 and 18. The Examiner concedes in item 8, page 23 of the Office Action that Vora et al. does not teach or suggest this feature.

Thus, even assuming arguendo that McClure et al. may disclose determining whether the data, which has an expression format indicated by the received search command, is stored in the database, as alleged by the Examiner, there is no teaching or suggestion in McClure et al. of determining whether the received search command can be transmitted to another database server and transmitting the received search command to another database server when it is determined that the received search command can be transmitted to another database server, as in claims 16 and 18. Indeed, the cited references do not even recognize the desirability or benefit of providing such a feature. Therefore, McClure et al. clearly does not make up for the deficiencies of Vora et al. and Lee et al.

In light of the above, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of claim 18. Therefore, the Examiner is respectfully requested to withdraw this rejection.

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### III. CONCLUSION

In view of the foregoing, Applicant submits that claims 1-2 and 4-19, all the claims presently pending in the application, are patentably distinct over the prior art of record and are allowable, and that the application is in condition for allowance. Such action would be appreciated.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned attorney at the local telephone number listed below to discuss any other changes deemed necessary for allowance in a telephonic or personal interview.

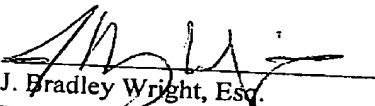
To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136.

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The Commissioner is authorized to charge any deficiency in fees, including extension of time fees, or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: August 25, 2005

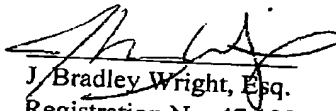
  
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#### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that I am filing this Amendment Under 37 CFR §1.116 by facsimile with the United States Patent and Trademark Office to Examiner Cam Y. T. Truong, Group Art Unit 2162 at fax number (571) 273-8300 this 25<sup>th</sup> day of August, 2005.

  
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